CVPIA Activities

The Central Valley Project Improvement Act (CVPIA), implemented in October 1992, mandated changes in management of the Central Valley Project, particularly for the protection, restoration, and enhancement of fish and wildlife. The following pages describe activities related to the CVPIA that occurred during 2002 and progress made toward achieving its goals.

Central Valley Project Improvement Act Overview

Waterfowl fly over the San Joaquin National Wildlife Refuge

Since 1992, Reclamation and the U.S. Fish and Wildlife Service (Service) have worked to meet the challenges that the CVPIA presents. Its implementation has been afforded highest priority, and major strides have been made in accomplishing the mandate that Congress provided. Many of the CVPIA's provisions have been completed, and most of the others are well under way. More than $630 million of State and Federal funds has been spent thus far to implement directed programs and projects. More time, effort, and funds will be expended in the future.

With the CVPIA's passage, Reclamation and the Service adopted three fish and wildlife restoration goals prescribed by the CVPIA. One of the most ambitious was to make all reasonable efforts to double the production of anadromous fish. Another was to supply water to Central Valley refuges and other migratory waterfowl habitats. The third was to mitigate for other CVPIA identified impacts.

Staff then began to develop procedures to implement the specific provisions of the CVPIA. A set of procedural objectives was developed to guide future activities. Measures undertaken to implement the CVPIA are designed to achieve its goals while providing the greatest public benefit and minimizing adverse impacts. Great emphasis is placed on forming partnerships and coordinating with other efforts planned or already under way throughout the Central Valley.

Interior has developed many partnerships and extensive coordination linkages with local, State, and Federal agencies, and private groups. CVPIA implementation continues to be coordinated with existing and ongoing restoration efforts such as the state of California's efforts to restore salmon and steelhead populations, the State Water Resources Control Board's (SWRCB) Water Quality Control Plan, and CALFED.

Coordination with CALFED is particularly important as most of CALFED's actions have similar objectives and address many of the same natural resource and water management issues as the CVPIA. Close coordination and a focus on functional integration of CVPIA and CALFED have helped the Special Projects staff to achieve common goals and to maximize benefits.

For additional information, contact the Special Projects Office at 916-978-5024 (TDD 916-978-5608).

Since 1992, Reclamation and the U.S. Fish and Wildlife Service have worked to meet the challenges that the CVPIA presents.

Salmon in the American River

Anadromous Fish Screen Program

Under Section 3406(b)(21) of the Central Valley Project Improvement Act (CVPIA), the Secretary of the Interior is required to develop and implement measures to avoid losses of juvenile anadromous fish resulting from unscreened or inadequately screened diversions on the Sacramento and San Joaquin Rivers, their tributaries, the Delta, and the Suisun Marsh.

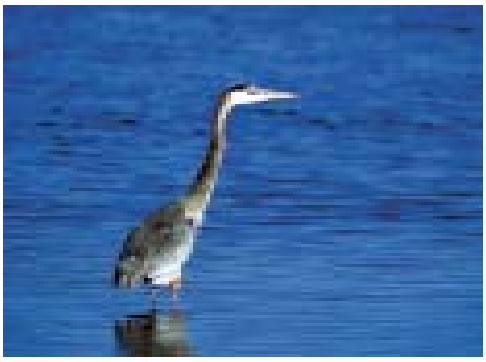
Since 1994, Reclamation and the U.S. Fish and Wildlife Service have been assisting the State of California through the Anadromous Fish Screen Program (AFSP) to install fish screens on unscreened diversions in the Central Valley.

To date, a total of 18 fish screening projects have been completed with cost-share funds from the AFSP. There are also two AFSP-funded fish screen projects under construction that will be completed in 2003. Several additional fish screen projects will be in the design phases in 2003. By the end of 2003, AFSP-funded fish screen projects will be preventing the entrainment of fish from roughly 4,000 cubic feet per second of water diverted for municipal and agricultural purposes.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).

Central Valley Conservation Program

The Central Valley Conservation Program (Program) was developed during the Endangered Species Act Section 7 consultation process to ensure that the existing operation of the Central Valley Project (CVP), implementation of the Central Valley Project Improvement Act (CVPIA), and renewal of CVP water service contracts would not jeopardize listed or proposed species or adversely affect designated or proposed critical habitat.



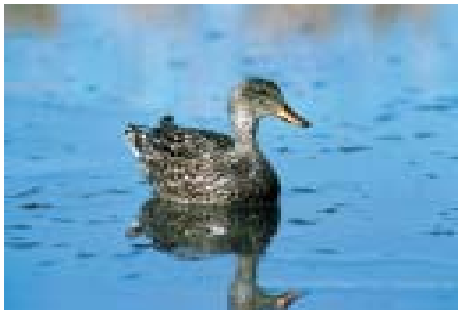
A Great Grey Heron enjoys a wetland made possible by the Central Valley Conservation Program.

The primary goal of the Program is to implement an aggressive adaptive management program that will protect, restore, and enhance special-status species and their habitats in areas directly or indirectly affected by the CVP. Fourteen conservation activities were funded in 2002 at a cost of approximately $2.4 million. Five acquisitions, primarily conservation easements of approximately 7,300 acres, were funded to protect habitat from future development. These acquisitions will protect gabbro soil chaparral, vernal pools/grassland complex, wetlands and riparian habitat, and associated Federal- and State-listed and other native species.

Funding was also provided to continue riparian brush rabbit and riparian woodrat surveys and genetic studies, other riparian restoration, surveys for large-flowered fiddleneck populations, and to construct fencing to protect riparian species and habitat.

For additional information, contact the Division of Environmental Affairs at 916-978-5052 (TDD 916-978-5608).

Habitat Restoration Program



A Gadwell hen enjoys wetlands protected by the Habitat Restoration Program.

The 1992 Central Valley Project Improvement Act (CVPIA), Section 3406(b)(1) "Other," authorized the Habitat Restoration Program to protect, restore, and mitigate past fish and wildlife impacts of the Central Valley Project (CVP) not otherwise addressed by the CVPIA. The goals of the Habitat Restoration Program are to:

- Protect and restore native habitats impacted by the CVP that are not specifically addressed in the Fish and Wildlife Restoration Activities section of the CVPIA. These habitats include riparian, aquatic, alkali desert scrub, wetlands (including vernal pools), foothill chaparral, valley-foothill hardwood, and grassland.
- Stabilize and improve populations of native species impacted by the CVP that are not specifically addressed in the Fish and Wildlife Restoration Activities section of the CVPIA. The focus is on given to Federal- or State-listed, proposed, or candidate species, or species of concern.

Nine conservation activities were funded in 2002 at a cost of $1.7 million. Three conservation easements, totaling approximately 2,475 acres, were funded to protect native habitat from future development.

These acquisitions, distributed throughout the Central Valley, will protect vernal pools and riparian habitats and their associated Federally listed and other native wildlife species. Funding was provided for the restoration of 260 acres of riparian habitat along the Sacramento River . A monitoring study for the giant garter snake was continued into the third year to provide important information regarding distribution and habitat requirements and to develop management guidelines.

For additional information, contact the Division of Environmental Affairs at 916-978-5052 (TDD 916-978-5608).

North-of-Delta Off-Stream Storage Investigation

Reclamation and the State Department of Water Resources are conducting a planning investigation of the expansion of CVP storage. The study was undertaken as a result of the Central Valley Project Improvement Act Project Yield Increase Investigation and the CALFED Bay-Delta Program initiatives. Both programs share a common goal of increasing water supply reliability for restoring ecosystem health and other beneficial uses.

Planning studies are being coordinated with State, other Federal and local agencies, and stakeholders. The North-of-Delta Off-Stream Storage Study is evaluating a several potential reservoir locations and conveyance alternatives along the west side of the Sacramento Valley between Red Bluff and Maxwell. The additional supply and flexibility could:

- Provide water to help offset the 800,000 acre-feet of yield re-allocated to the environment;

Water Fact

Long-simmering conflicts over Central Valley water rates and environmental impacts came to a head in 1992 with passage of the CVPIA.

- Help meet the goals of the CALFED Program;
- Improve fishery, riparian, wetland, and recreational conditions;
- Provide water offsetting reductions in flows from the Trinity River to the Sacramento River; and
- Provide additional flood control along the Sacramento River.

Significant activities completed during 2002 include pre-feasibility data collection, aerial surveys, hydrologic and hydraulic studies, public involvement, and plan formulation. Work will continue on National Environmental Policy Act and California Environmental Quality Act documentation, and plan formulation activities in 2003. An administrative draft Environmental Impact Statement/ Environmental Impact Report is scheduled for December 2003.

For additional information, contact the Division of Planning at 916-978-5060 (TDD 916-978-5608).

Snow geese fill the sky above the Merced National Wildlife Refuge.

Refuge Water Supply Program

The Central Valley Project Improvement Act directs Reclamation to provide directly or through contractual agreements with other appropriate parties firm water supplies of suitable quality to maintain and improve wetland habitat areas on Federal, State, and private refuges in California's Central Valley. The Refuge Water Supply Program (RWSP) is a joint effort of Reclamation and the U.S. Fish and Wildlife Service (Service).

In 2001, Reclamation entered into five long-term (25-year) water supply contracts: two with the California Department of Water Resources, two with the Service, and one with the Grassland Water District. These contracts govern the delivery of approximately 404,000 acre-feet of Level 2 water and 159,000 acre-feet of Incremental Level 4 water that is to be provided annually to the refuges covered by the CVPIA provisions.

The Level 2 and Level 4 quantities are specified in CVPIA. Generally, Level 2 water is provided from CVP yield. Incremental Level 4 water is acquired from voluntary sellers. Delivering this water requires access to and use of conveyance facilities of local water districts that can physically deliver water to the boundaries of the refuges. Thus, Reclamation has executed five long-term (25-year) and three interim (annual) wheeling agreements with local, non-Federal entities to deliver the water to the refuge boundaries.

In 2002, negotiations continued with Biggs-West Gridley Water District toward execution of a conveyance and construction cooperative agreement. Additionally, Reclamation chairs the Interagency Refuge Water Management Team, comprised of representatives from the Service, California Department of Fish and Game, and Grassland Resource Conservation District, continued their work in 2002 expediting coordination of monthly refuge water delivery schedules and acquired Incremental Level 4 water supplies.

Water Fact

The CVPIA aims to restore wetlands by firming up and increasing water supplies for refuges.

All refuges have received their respective Level 2 water allocations each year following the CVPIA's enactment, except for reductions due to conveyance capacity and distribution system limitations at some refuges and reductions specifically requested and scheduled by refuge managers. Three South-of-Delta refuges and two North-of-Delta refuges cannot receive full Level 2 deliveries until the Department of the Interior completes conveyance facilities construction, currently scheduled for completion in 2006.

Provision of additional and/or more "firm" water supplies to Central Valley refuges has allowed managers to respond better to the habitat requirements of wetland-dependent species. Refuges receiving CVPIA water supplies experienced an approximate 12,000-acre valley-wide increase in average annual wetland acreage when compared to pre-CVPIA conditions.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).

Tracy Fish Test Facility

In accordance with the Central Valley Project Improvement Act, Reclamation works to improve or eventually replace fish protection facilities at Tracy in the south Delta (Tracy Pumping Plant; Delta Mendota Canal). New technologies in debris removal and fish handling, including fish capture, holding, and sorting by size, and transport back to Delta waters, need to be developed before large expenditures are made on final fixes to the fish loss problems. Old behavioral based louver technology (1950's) must be replaced or supplemented by small mesh positive barrier screening technology to address increased needs for protecting delicate native species, some of which are federally and State listed.

Reclamation, with interagency coordination and funding assistance, is developing the Tracy Fish Test Facility (TFTF) adjacent to the Tracy Fish Collection Facility in an attempt to provide new technologies that will be eventually acceptable and workable. The Division of Resources Management provides leadership in TFTF interagency coordination, design, and research to assist Reclamation's South-Central California Area Office and the Tracy Office in implementing this program.

TFTF Interagency Coordination - Monthly meetings involving Reclamation (lead), National Marine Fisheries Service, U.S. Fish and Wildlife Service, California Departments of Fish and Game and Water Resources, CALFED, water users, and university staff were again held in 2002, providing continued interagency communication, design and research planning. TFTF designs reflect the many desires and inputs from regulatory and water development agencies, as well as from local water authorities and fish facility experts.

TFTF Designs - TFTF designs are unique, providing the flexibility for testing a vast range of conditions and parameters in the real world of the south Delta. Large variances in debris loadings, fish species and sizes, and hydraulic conditions must be scientifically tested to guide future decisions on construction and operation of fish facilities. Reclamation engineers in Denver worked with fishery scientists in Denver and the MP Region and with regulatory staff to provide new TFTF designs

Tracy Fish Test Facility designs are unique, providing the flexibility for testing a vast range of conditions and parameters in the real world of the south Delta.

in 2002 that will lead to smaller, more economical facilities having greater testing flexibility.

Research and Testing - TFTF research and testing continued in 2002 with cooperative efforts between Regional and Denver Offices and universities on ten projects. Much work was done again with the physical "fishery engineering" models in Denver (fish sorting, debris handling, leaky louver testing, and validation of models predicting fish salvage efficiency at Tracy) and at Tracy ("fish friendly" pump, demonstration and testing new acoustical cameras for underwater fish viewing day or night, and initial work on new experimental above-ground fish holding tanks). Also, the development of a TFTF research web site continued and draft study plans were completed for an initial 3-year TFTF testing period. Continued publication of Tracy results in the peer-reviewed report series brought the total number to 16. Three additional technical reports were brought near completion, while ten additional reports are under way. Technical and poster presentations from Tracy research were presented at State and national scientific forums.

Decisions for Tracy Fish Test Facility construction became more complex in 2002 ...

Status and Future Process for TFTF - Decisions for TFTF construction became more complex in 2002, with increased involvement with the Interagency Ecological Program (IEP) and CALFED Bay-Delta Program. The CALFED Bay-Delta Program and the IEP have been included in the TFTF construction decision process. Based on this process, construction could be completed in 2006, with the initial 3-year study of an operating TFTF in 2006-2009.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).

Trinity Dam and Reservoir

Trinity River Restoration Program

Located in northern California, the Trinity River is one of the most beautiful in the State and nationally known for its salmon and steelhead fisheries. In 1964, the Trinity and Lewiston Dams were completed to provide water supplies and power generation for California's Central Valley – but which resulted in the diversion and export of as much as 75 percent to 90 percent of the Trinity River's flow for the past 4 decades.

The Trinity River Restoration Program (Program) was established in 1984, under Public Law 98-541, to restore and maintain the fish and wildlife stocks of the Trinity River Basin to those levels that existed just prior to the construction of the CVP's Trinity River Division. The Central Valley Project Improvement Act (P.L. 102-575) acknowledged the Federal Government's trust responsibilities, increased in stream flows to 340,000 acre-feet per year, and directed the Secretary of the Interior to develop procedures for restoring and maintaining the Trinity River fishery. To do this, Reclamation plays a key role as a member of the Trinity Management Council, the decision-making body charged with setting policy for the Program.

The Trinity River Mainstem Fishery Restoration Final Environmental Impact Statement was completed in October 2000, with the Record of Decision (ROD) signed on December 19, 2000. Shortly after the ROD was signed, a lawsuit was filed in Federal District Court by a group of Central Valley water and power users.

On March 19, 2001, Judge Oliver Wanger enjoined that part of the decision that provided increased flows for the Trinity River required preparation of a Supplemental EIS/EIR and allowed other aspects of the Program to proceed.

On April 19, 2002, Judge Wanger modified his preliminary injunction and allowed Reclamation to release up to 468,600 acre-feet of water to the Trinity River in water year 2002, resulting in peak flows of 6,000 cubic feet per second for 3 days in May 2002. This helped achieve a variety of geomorphic and fish habitat objectives within the river channel. Much progress in other non-flow restoration activities was made during 2002, including:

- Environmental studies and engineering designs for bridge modifications, channel restoration sites, and gravel management activities are well under way.
- Other restoration activities include: dredging and maintenance of the Grass Valley Creek sediment control ponds, a feasibility study for sediment control ponds on Indian Creek and Rush Creek, and planning for spawning gravel augmentation projects.
- Establishment of the Trinity Adaptive Management Working Group (federally chartered advisory committee) to allow for formal stakeholder participation. The Secretary of the Interior announced membership of this group on November 14, 2002, and its first meeting will take place in February 2003.
- Establishment of the Adaptive Environmental Assessment and Management Team to provide technical and scientific support for the Program. The Executive Director was hired in October 2001, the Weaverville field office opened in September 2002, and staffing that office with scientific and technical resource specialists is largely complete.

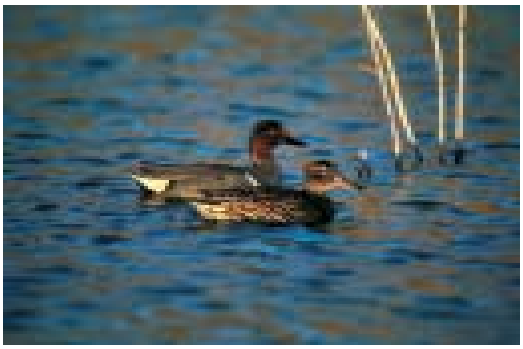
On April 19, 2002, Judge Wanger allowed Reclamation to release up to 468,600 acre-feet of water to the Trinity River in water year 2002, resulting in peak flows of 6,000 cubic feet per second for 3 days.

For additional information, contact the Trinity River Restoration Program Office in Weaverville, CA, at 530-623-1800.

Water Acquisition Program

The Central Valley Project Improvement Act directs that Reclamation, in coordination with the U.S. Fish and Wildlife Service (Service), acquire water to provide Level 4 water supplies for wildlife refuges in the Central Valley. The Level 4 water supplies provide optimum habitat management levels at the refuges for the benefit of migratory and wetland-dependent wildlife.

Under the Water Acquisition Program (WAP) during 2002, Reclamation purchased 85,390 acre-feet of water from willing sellers to help meet Level 4 refuge water requirements. The Level 4 water allows for optimum development and management of wetlands to provide better water quality, habitat diversity, and a longer winter flooding period. This results in improved habitat conditions and an increase in the survival rate and breeding success of migratory waterfowl.



Green winged Teals enjoy wetlands made possible by the Water Acquisition Program.

Reclamation purchased 85,390 acre-feet of water from willing sellers to help meet Level 4 refuge water requirements.

In Fall 2002, the WAP initiated a preliminary study to evaluate the potential of using ground water, either directly or through conjunctive use opportunities, as an alternate water supply for Central Valley wildlife refuges. Both on-site and off-site sources are being investigated. This study is part of an over-all effort by WAP to diversify sources of Level 4 water and to seek reliable long-term economical acquisitions to meet Level 4 refuge water supply needs. Study results may also help to diversify Level 2 refuge water supplies, especially for San Joaquin Valley wildlife refuges. This activity, which should be completed in mid-Summer 2003, is being conducted under the authority of CVPIA Section 3406.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).

Water Conservation Program

The Reclamation Reform Act of 1982 required that a Water Conservation Plan (Plan) be prepared and submitted by certain entities that have entered into a repayment contract or water service contract with Reclamation. The "Criteria for Evaluating Water Management Plans" (Criteria) was established in 1993 and revised in 1996 and 1999.

The Water Conservation Program seeks to help water districts use conservation measures.

The draft 2002 Criteria was noticed in the Federal Register and on the Internet at *www.watershare.usbr.gov* in order to solicit comments. In addition, three stakeholder workshops were conducted. In all, approximately 15 comments were received. Once the Criteria becomes final, all Plans submitted will be evaluated using the 2002 Criteria.

In addition to Plan management, the Water Conservation Program provides assistance to water districts in the areas of Water Management Planning, Conservation Education, Demonstration of Innovative Technologies, and Implementation of Conservation Measures. In 2002, the Mid-Pacific Region's Water Conservation Team (Team) provided approximately $2 million in grants to participating districts. These participants provided approximately $1.2 million in cost-share funding.

Throughout 2002, the Team continued the interagency partnerships with CALFED's Water Use Efficiency Program and the Urban and Agricultural Water Management Councils. The Team currently oversees nine CALFED water use efficiency grants. Additionally, an agreement was developed between Reclamation, the California Urban Water Conservation Council (Council), the California Department of Water Resources, and CALFED to assist the Council in developing a program of technical and financial incentives for water use efficiency in urban sectors.

For 2003, the Team will continue efforts to help districts with Plan development and Annual Updates. The Team will also continue to build on its partnerships with Cal Poly San Luis Obispo Irrigation Training and Research Center, Chico State Agricultural Teaching and Research Center, Fresno State's Center for Irrigation Technology, and the Water Education Foundation's Project WET.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).

Water Transfers

During Water Year 2002, approximately 419,000 acre-feet of CVP water had been approved for transfer under the water transfer provisions of the Central Valley Project Improvement Act. These transfers helped ensure the CVP and its users' needs were met.

As part of the CVPIA Water Transfer Program, Reclamation executed a Memorandum of Understanding (MOU) with the California Department of Water Resources (DWR) and the California State Water Resources Control Board (SWRCB), regarding operation of a Water Transfer Information Clearinghouse. The MOU establishes a framework for agency roles and responsibilities and other mechanisms for managing and implementing the Clearinghouse.

Water is transferred using existing rivers and canals.

Establishing a water transfer clearinghouse to be operated jointly by Interior and the State of California Resources Agency was a goal of Interior under its 1998 Final CVPIA Administrative Proposal on Water Transfers and a key element of the CALFED Bay-Delta Water Transfer Program.

Reclamation's CVPIA Water Transfer Program continues to work, in conjunction with DWR and SWRCB, in developing and co-managing the "On-Tap" Website, an on-line water transfer information source to improve access to information on water transfers, to clarify water transfer policies and procedures, and provide up-to-date information about ongoing water transfer activities. On-Tap is a key component of the Water Transfer Information Clearinghouse and functions as an informational source to facilitate water transfers within California. The ONTAP Website is located at: *http://ontap.ca.gov*.

For additional information, contact the Division of Resources Management at 916-978-5200 (TDD 916-978-5608).